

CLAIM LISTING

1. (Previously presented) A mobile communication network comprising a group of cells, each cell of the group of cells being operable to simulcast an identical common simulcast broadcast carrier carrying identification and signaling information common for the group of cells on a broadcast carrier frequency common for the group of cells, at least a first cell being associated with a first traffic carrier not common for the group of cells, wherein at least a first mobile station is arranged to intermittently perform an intracell handover to the common simulcast broadcast carrier, and means, situated in a fixed part of the network, for performing measurements of the radio environment when the mobile station is using the common simulcast broadcast carrier after an intracell handover to the common simulcast broadcast carrier by the first mobile station.
2. (Previously presented) A claim as claimed in claim 1 wherein the intracell handover is from the first traffic carrier to the common simulcast broadcast carrier.
3. (Original) A mobile communication network as claimed in claim 1 wherein a clock means is arranged to generate a signal instructing said intracell handover.
4. (Previously presented) A mobile communication network as claimed in claim 3 wherein said clock means is located in the fixed part of the network and is arranged to transmit said signal to one or more mobile stations.
5. (Original) A mobile communication network as claimed in claim 1 wherein a signal instructing said intracell handover is arranged to be generated in response to a measurement of received signal level or quality of a radio transmission from a mobile station.
6. (Previously presented) A mobile communication network as claimed in claim 1 wherein one or more base stations are arranged to measure a received signal level and/or quality of the signal transmitted by the mobile station on the common simulcast broadcast carrier.

7. (Original) A mobile communication network as claimed in claim 1 wherein a handover is determined in response to the measurements.
8. (Original) A mobile communication network as claimed in claim 1 wherein base stations in different cells are arranged to measure transmitted signal level and/or signal quality from a plurality of mobile stations in such new uplink channels and the network is arranged to process the measurements to determine the distribution of mobile stations within the network.
9. (Previously presented) A mobile communication network as claimed in claim 1 wherein a base station of a cell from which the intracell handover is made is arranged to be re-tuned to receive on a frequency different from the first traffic channel while traffic is being handled by the common simulcast broadcast carrier.
10. (Original) A mobile communication network as claimed in claim 9 wherein the base station of the cell from which the intracell handover is made is arranged to be used to monitor interference on the first traffic carrier while traffic is being handled by the new uplink channel.
11. (Original) A mobile communication network as claimed in any preceding claim which is a GSM network.
12. (Previously presented) A base station operating in a communication system having a group of cells, each cell of the group of cells being operable to simulcast an identical common simulcast broadcast carrier carrying identification and signaling information common for the group of cells on a broadcast carrier frequency common for the group of cells and at least a first cell being associated with a first traffic carrier not common for the group of cells, the base station comprising means for directing a mobile station to intermittently perform an intracell handover to the common simulcast broadcast carrier and means for performing measurements of the radio environment when the mobile station is using the common simulcast broadcast carrier after an intracell handover to the common simulcast broadcast carrier by the mobile station.

13. (Previously presented) A method of operating a mobile communication network with a group of cells, each cell of the group of cells being operable to simulcast an identical common simulcast broadcast carrier carrying identification and signaling information common for the group of cells on a broadcast carrier frequency common for the group of cells, and at least a first cell being associated with a first traffic carrier not common for the group of cells, comprising the steps of: intermittently performing an intracell handover of a first mobile station to the common simulcast broadcast carrier, and in a fixed, part of the network, performing measurements of the radio environment when the mobile station is using the common simulcast carrier after an intracell handover to the common simulcast broadcast carrier by the first mobile station.